

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 1(D). This sheet, which includes Figs. 1(A)-1(D), replaces the original sheet including Figs. 1(A)-1(D). In Fig. 1(D), a typographical error has been corrected.

Attachment: Replacement Sheet(s)
Annotated Sheet Showing Changes



REMARKS/ARGUMENTS

Claims 1-5 are present in this application. By this Amendment, the title of the invention, the drawings, the specification and claims 1, 2 and 5 have been amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

The drawings were objected to due to a typographical error in Fig. 1(D). The typographical error has been corrected herein. An annotated sheet showing the correction and a replacement sheet are submitted herewith.

The drawings were further objected to as failing to comply with 37 C.F.R. §1.84(p)(5). The Office Action contends that reference characters 11, 12 and 13 are not mentioned in the description. To the contrary, however, these reference numerals appear in the paragraph beginning at page 1, line 16.

Withdrawal of the objections are respectfully requested.

The disclosure was objected to due to informalities. The changes suggested by the Examiner, which are noted with appreciation, have been made herein. Withdrawal of the objection is requested.

Claims 1-5 were rejected under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed.

Claims 1 and 2 have been amended to more clearly satisfy the requirements of 35 U.S.C. §112, second paragraph. In particular, claim 1 recites that the preformed product has a front surface and a back surface. Cutting the preformed product is performed through the front surface and the back surface by a predetermined width to obtain strip-form preformed product pieces each having a front face separated from the front surface, a back face separated from the back surface, and a cut face across which the preformed product was cut. The aligning step has been

clarified to recite that the strip-form preformed product pieces are aligned into a plate shape having a front side and a back side each constituted by the cut faces of the strip-form preformed product pieces. Finally, the press-forming step has been amended to recite the step of press-forming the aligned strip-form preformed product pieces into a separator shape Claim 2 has been similarly amended. Applicants respectfully submit that those of ordinary skill in the art would readily understand the subject matter that the applicant regards as his invention defined in claims 1 and 2. Claim 5 has been amended as suggested by the Examiner.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-5 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 3,819,413 to Nippe et al. This rejection is respectfully traversed.

The Nippe patent describes a rechargeable metal electrode for storage batteries and metal-air cells including active electrode material. Although some structural similarities exist, because this structure is entirely distinguishable from a separator for a fuel cell, there are significant differences in the steps performed for producing the respective products. Consequently, the techniques disclosed in the Nippe patent are distinguishable in problems to be resolved as well as the means for solving the problems.

Claim 1 defines a step of press-molding the conductive resin composition under pressure without heating to obtain a preformed product in the form of a flat plate In this context, the Office Action references the Nippe patent at column 4, lines 57-67. This section in the Nippe patent, however, merely provides that the frameworks are “encapsulated with a porous armor coating and the latter is connected with a contact layer.” It would be readily apparent to those of ordinary skill in the art that the claimed step of press-molding the conductive resin composition is readily distinguishable from “encapsulating” a framework with an armor coating. This

distinction is exemplified by the structural differences between a metal electrode and the fuel cell separator that is the subject of the claimed invention. Nothing in the Nippe patent suggests that the term “encapsulated” should be interpreted in any manner other than its ordinary meaning. Webster’s Collegiate Dictionary, 11th Edition, defines “encapsulate” as “to enclose in or as if in a capsule.” In contrast, as would be apparent to those of ordinary skill in the art, a step of “press-molding” a conductive resin composition is performed “under pressure” without heating to obtain a preformed product in the form of a flat plate. The Nippe patent does not anywhere remotely disclose that encapsulating the framework with a porous armor is performed “under pressure” as claimed.

Additionally, after aligning the strip-form preformed product pieces, the method of the invention defines a step of press-forming the aligned strip-form preformed product pieces into a separator shape In this context, the Office Action references the Nippe patent at column 7, lines 59-67. As noted in the Office Action, this section in the Nippe patent describes that fiber frameworks 42, 43 are arranged on both sides of a contact layer 41 and are covered by respective armor coatings 44, 45. This “covering” does not remotely disclose the “press-forming” step of the invention. Indeed, no such press-forming is necessary or desirable in a metal electrode. The Nippe patent does not disclose in any manner that any pressure whatsoever is applied when covering the fiber frameworks with respective armor coatings. In fact, due at least to differences between a metal electrode used for metal-air batteries as disclosed in the Nippe patent and a separator for fuel cells as described in the present specification, there is no suggestion in the Nippe patent to apply or modify its steps into a process for molding a fuel cell.

Applicants thus respectfully submit that the rejection is misplaced.

Independent claim 2 defines related subject matter, and Applicants respectfully submit that claim 2 is allowable for reasons similar to those discussed above with regard to claim 1. In addition, claim 2 defines a step of aligning the strip-form preformed product pieces into a plate shape having a front side and a back side each constituted by the cut face and partially by the front and back faces of the strip-form preformed product pieces. As such, part of the front and back sides of the plate shape include the cut faces, and part of the front and back sides of the plate shape include the front and back faces. This subject matter is also lacking in the Nippe patent. The Office Action possibly did not appreciate this feature of the invention in light of the alleged rejections under 35 U.S.C. §112, second paragraph. With the subject matter now more clearly defined, it is apparent that at least this subject matter is also lacking in the Nippe patent, and Applicants respectfully submit that claim 2 is also allowable.

With respect to dependent claims 3-5, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.


In view of the foregoing amendments and remarks, Applicants respectfully submit that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

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Respectfully submitted,

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